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10/560,837

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Thierry D'Athis

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EXAMINER

NGUYEN, THAN VINH

ART UNIT

PAPER NUMBER

2187

MAIL DATE

DELIVERY MODE

07/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b> 10/560,837	<b>Applicant(s)</b> D'ATHIS, THIERRY	
	<b>Examiner</b> Than Nguyen	<b>Art Unit</b> 2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-24, 26-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34 is/are allowed.
- 6) ☒ Claim(s) 18-24 and 26-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/15/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |



**DETAILED ACTION**

1. This is a response to the amendment, filed 3/28/08.
2. Claims 18-24,26-34 remain pending.
3. Acknowledgment is made of the submitted IDS documents. It should be noted that document 2812116A seems to be incorrect as the inventor and date published do not match the information on the PTO 1449. Further more, the submitted document describes "A Beverage Dispensing Apparatus", which is totally unrelated to the current invention. Applicant must recheck the document records and should resubmit the proper document and/or new PTO-1449.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 18-24,26-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 18 recites the limitation " the maximum number of records" in line 7. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 18 recites the limitation "the group of records likely to be updated simultaneously in a write operation" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.
8. Claims 19-24 are also rejected for incorporating the error of the parent claim
9. As to claim 26, it is unclear as to the steps that comprises the claimed method since Applicant claims, in multiple location, "comprising" or "comprises the steps of" or "comprising



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the following steps” (See line 2, 5, and 13). It is unclear as to the true steps that comprises the claimed method. Clarification is required.

18. As to claim 26, the limitation “deducing the free allocated memory space” is vague and indefinite. The term “to deduce” means to determine by deduction or conclusion by reasoning. The function of “deducing” requires a human intelligence to perform since reasoning is required to come up with a conclusion. Since Applicant fails to indicate the required algorithms needed for a computer to perform this function, an infinite possible methods/algorithm is possible to achieve this result. Thus, without further clarification of how the computer performs the function of deduction, this claimed limitation is ambiguous and indefinite.

20. Claim 26 recites the limitation "the file descriptor" in line 14. There is insufficient antecedent basis for this limitation in the claim.

21. Claims 27-33 are also rejected for incorporating the error of the parent claim.

### ***Response to Amendment/Arguments***

22. Applicant has amended the claims to include new limitations not previously considered. The amended claims are addressed below.

23. Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. As to independent claim 18 and 26, Applicant argues Fujio does not teach “the number of excess memory space P being at least equal to the maximum number of records likely to be updated simultaneously in a write operation”. This argument is unpersuasive. Claims 18 and 26 are method claims. Method claims are defined by the steps claimed. The limitation argued above are not included in the steps defined by the claims but in the preamble that defines the environment of the claimed invention. Elements that define the environment under which the



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invention operates, in a method claim, are not given patentable weight. Further more, the above limitation does not further contribute to the claimed steps of the method nor are necessary for the claimed method to operate. As to claim 18, the claimed method is interpreted to be defined by the steps of writing the data of each file record in the allocated spaces and writing a descriptor of the file in the medium. As to claim 26, the claimed method is interpreted to be defined by the steps of reading the file descriptor, deducing the free allocated memory spaces, writing the new data into free allocated spaces, and writing a new descriptor in the medium. The prior art of record teaches the above steps of these methods (see claim rejections below). Claims 18-24,26-33 are still rejected under the previous cited art.

### ***Claim Rejections - 35 USC § 102***

24. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

25. Claims 18-20,22-24,26-28,30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujio (US 6,189,081).

As to claim 18,26:

26. Fujio teaches a method of writing a file in a memory medium, *the file including a determined number of data records with each record having a determined size, a determined number of memory spaces of the*



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*memory medium being allocated to write the data of the file records (allocate space for files; 5/60-65); a position of each memory space being determined, the number of memory spaces allocated exceeding the total number of records in the file (allocate space for files, space available greater than requested; 5/60-65), the number of excess memory spaces  $P$  being at least equal to the maximum number of records of the group of records likely to be updated simultaneously in a write operation, the method comprising the following steps: writing the data of each file record in a memory space taken from the allocated memory spaces (write to allocated space; 8/31-40); writing a descriptor of the file in the memory medium, the file descriptor referencing memory spaces taken from the allocated memory spaces to enable the allocated memory space in which the data of each file record is written to be determined (write/update management information table (FAT); 8/41-46; 7/13-17, 44-48; 5/60-65).*

As to claim 19,27:

27. Fujio teaches the records of a file, for which a group of memory spaces is allocated, all have the same size (8/54-60).

As to claim 20,28:

28. Fujio teaches the descriptor is encoded by a number representing an arrangement index in a predetermined table, said table containing all the possible arrangements of the records of the file in the allocated memory spaces (each FAT entry has sequence number 61; 3/9-12, 50-65).

As to claim 22,30:

29. Fujio teaches a sequence number is stored, associated with each descriptor (each file has specific entry number in FAT; 3/10-12, 50-65).



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As to claim 23,31:

30. Fujio teaches the sequence number is encoded on two bits (multiple bit file entry number; 3/10-12, 50-65).

As to claim 24,32:

31. Fujio teaches the free memory spaces are not referenced to minimize the size of the file descriptor (FAT only has entries for allocated memory; 3/10-12,50-65).

As to claim 33:

32. Fujio teaches the new descriptor is copied to the first to perform a ratification (overwrite FAT entry with new entry; 7/45-50; 8/41-48).

As to claim 26:

33. Fujio teaches a method of updating a file written in a memory medium, comprising: a determined number of records of determined sizes comprising some of these records being intended to be updated with new data replacing old data with a determined number of memory spaces of the memory medium being allocated to write the data from the file records comprising the steps of: determine a position of each memory space the number of allocated memory spaces exceeding the total number of file records; the number of excess memory spaces P being at least equal to the maximum number of records of the group of records likely to be updated simultaneously in a write operation writing the data of each file record in a memory space taken from the allocated memory spaces, a first descriptor of the file being written in the memory medium, taking file descriptor referencing memory spaces from the allocated memory spaces to



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enable the allocated memory space in which the data of each file record is written to be determined; the method comprising the following steps: reading the file descriptor (read management information table, FAT entry; 7/28-34), deducing the free allocated memory spaces are deduced from this (determined free/available space for write; 7/36-8/30' 5/50-60; writing the new data in memory spaces taken from the free allocated memory spaces (write to allocated space; 8/31-40); writing a new descriptor of the file in the memory medium, the new descriptor referencing the memory spaces in which the new data is written in place of the memory spaces in which the old data written (write/update management information table (FAT); 8/41-46; 7/13-17, 44-48; 5/60-65).

***Claim Rejections - 35 USC § 103***

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35. Claims 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujio (US 6,189,081) in view of Tate et al (US 5,991,774).

As to claim 21,29:

36. Fujio does not teach a seal is stored, associated with the data of each descriptor, the seal being an increasing function of the number of zero bits in the descriptor. It is common to store error-correcting code, such as CRC, with the file to ensure the file is error free. Tate teaches storing error-correcting code with the file to ensure that the file is error free(2/1-33; 3/2-55). It



would have been obvious to one of ordinary skills in the art to use the teachings of Tate et al, in the invention of Fujio, to store error correcting codes with the file, so ensure an error-free file.

*Allowable Subject Matter*

37. Claim 34 is allowed.

38. As to claim 34, the prior art does not teach a method of allocating memory spaces of a memory medium comprising the steps of (emphasis in bold): selecting a group of records of data, these records belonging to one or more files (FTS), the data of these records being intended to be written in the memory medium, the group of records comprising a determined number of records, each record of the group having a determined size, **determining a number N of memory spaces is the number N exceeding the number of records in the group of records, the number of excess memory spaces P being at least equal to the maximum number of records of the group of records likely to be updated simultaneously in a write operation;** choosing a group of memory spaces including N memory spaces, the memory spaces of the group forming the memory spaces allocated to write the data of the selected records, each memory space in the group having a determined size and a determined position, the size of the memory spaces being sufficient to write into them the data from the records of the group.

*Conclusion*

39. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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